

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A filter unit for the purification of air, the filter unit comprising:

a first filter element comprising granular activated carbon as an adsorbent material, and  
a second filter element comprising a combination of granular activated carbon and activated carbon fibers as an adsorbent material[.],

wherein the mean particle diameter of the granular activated carbon of the first filter element is greater than the mean particle diameter of the granular activated carbon of the second filter element.

2. (original) A filter unit as in claim 1 wherein the granular activated carbon is spherical activated carbon.

3. (original) A filter unit as in claim 1 wherein the second filter element is arranged downstream of the first filter element.

4. (cancelled)

5. (currently amended) A filter unit as in claim [4] 1 wherein the mean particle diameter of the granular activated carbon of the first filter element is at least 0.05 mm greater than the mean particle diameter of the granular activated carbon of the second filter element.

6. (currently amended) A filter unit as in claim [4] 1 wherein the mean particle diameter of the granular activated carbon of the first filter element is at least 0.2 mm greater than the mean particle diameter of the granular activated carbon of the second filter element.

7. (original) A filter unit as in claim 1 wherein further comprising an additional filter element arranged between the first filter element and the second filter element, the additional filter element containing granular activated carbon as the adsorbent material.

8. (original) A filter unit as in claim 1 wherein further comprising at least one separating filter element for separating solid particles preceding the first and second filter elements.

9. (original) A filter unit as in claim 8 wherein the separating filter element is a textile material.

10. (original) A filter unit as in claim 8 wherein the separating filter element effects purely mechanical separation of solid particles.

11. (original) A filter unit as in claim 7 wherein the granular activated carbon of at least one of the first filter element and the additional filter element is present in the form of loose fill.

12. (original) A filter unit as in claim 7 wherein the granular activated carbon of at least one of the first filter element and the additional filter element is fixed in a three-dimensional, air-permeable support structure.

13. (original) A filter unit as in claim 12 wherein the three-dimensional support structure is an open-cell foamed plastic.

14. (original) A filter unit as in claim 13 wherein the mean cell diameter of the open-cell foamed plastic is at least twice as great as the mean particle diameter of the granular activated carbon of the at least one of the first filter element and the additional filter element.

15. (original) A filter unit as in claim 7 wherein the mean particle diameter of the granular activated carbon of the first filter element is greater than the mean particle diameter of the granular activated carbon of the additional filter element.

16. (currently amended) A filter unit as in claim ~~7~~ 15 wherein the mean particle diameter of the granular activated carbon of the first filter element is at least 0.05 mm greater than the mean particle diameter of the granular activated carbon of the additional filter element.

17. (currently amended) A filter unit as in claim 7 16 wherein the mean particle diameter of the granular activated carbon of the first filter element is at least 0.2 mm greater than the mean particle diameter of the granular activated carbon of the additional filter element.

18. (original) A filter unit as in claim 1 wherein the granular activated carbon is produced by carbonization and subsequent activation of suitable organic starting materials in granular form.

19. (original) A filter unit in as in claim 1 wherein the activated carbon fibers are produced by carbonization and subsequent activation of suitable organic starting fibers.

20. (original) A filter unit as in claim 19 wherein the starting fibers are selected from among the groups of cellulose fibers, fibers based on cellulose derivatives, phenol resin fibers, polyvinyl alcohol fibers, pitch fibers, acrylic resin fibers, polyacrylonitrile fibers, aromatic polyamide fibers, formaldehyde resin fibers, divinylbenzene-crosslinked polystyrene fibers, lignin fibers, cotton fibers and/or hemp fibers.

21. (original) A filter unit as in claim 1 wherein the activated carbon fibers are present in the form of an activated carbon fiber textile material.

22. (original) A filter unit as in claim 1 wherein the activated carbon fibers have mean fiber diameters of 1-25  $\mu\text{m}$ .

23. (original) A filter unit as in claim 1 wherein the activated carbon fibers have a length-specific weight (titer) of 1-10 dtex.

24. (original) A filter unit as in claim 1 wherein the mean particle diameter of the granular activated carbon in the second filter element is at least three times greater than the mean fiber diameter of the activated carbon fibers.

25. (original) A filter unit as in claim 1 wherein the granular activated carbon and the activated carbon fibers in the second filter element are arranged in layers that are separate but that border on each other and/or are permanently joined to each other.

26. (original) A filter unit as in claim 1 wherein at least one of the granular activated carbon and the activated carbon fibers in the second filter element are fixed on an air-permeable support.

27. (original) A filter unit as in claim 1 wherein at least one of the granular activated carbon and the activated carbon fibers have a specific surface (BET) of at least 800 m<sup>2</sup>/g and up to 1,500 m<sup>2</sup>/g.

28. (original) A filter unit as in claim 1 wherein at least one of the granular activated carbon and the activated carbon fibers are impregnated with an impregnation.

29. (currently amended) A filter unit as in claim 28 wherein the impregnation is

based on at least one of metals and metal compounds selected from the group comprising copper, cadmium, silver, platinum, palladium, zinc, and mercury, and their compounds.

30. (original) A filter unit as in claim 28 wherein the impregnation is one of an acid and a basic impregnation.

31. (currently amended) A filter unit in as in claim 28 wherein said impregnation comprises an impregnating agent which is 0.01 to 15 wt.% of the amount of impregnated activated carbon material[.,].

32. (currently amended) A filter unit for the purification of air, the filter unit comprising:

a first filter element comprising granular activated carbon as an adsorbent material,  
an additional filter element comprising granular activated carbon as an adsorbent material, and  
a second filter element comprising granular activated carbon and activated carbon fibers as an adsorbent material[.,].

wherein the mean particle diameter of the granular activated carbon of the first filter element is greater than the mean particle diameter of the granular activated carbon of the second filter element.

33. (original) A filter unit as in claim 32 wherein the filter elements are arranged one after the other in a downstream as follows: the first filter element, the additional filter element, and the second filter element.

34. (currently amended) A method of purifying air, comprising:  
providing a filter unit including a first filter element comprising granular activated carbon as an adsorbent material, a second filter element comprising a combination granular activated carbon and activated carbon fibers as an adsorbent material, and an additional filter element comprising granular activated carbon as an adsorbent material arranged between the first filter element and the second filter element,

wherein the mean particle diameter of the granular activated carbon of the first filter element is greater than the mean particle diameter of the granular activated carbon of the second filter element; and

flowing air to be purified through the filter unit.

35. (new) A filter unit as in claim 1 wherein the granular activated carbon and the activated carbon fibers have a specific BET surface of at least  $800 \text{ m}^2/\text{g}$ .

36. (new) A filter unit for the purification of air, the filter unit comprising:  
a first filter element comprising granular activated carbon as an adsorbent material;  
a second filter element comprising a combination of granular activated carbon and activated carbon fibers as an adsorbent material; and

an additional filter element arranged between the first filter element and second filter element, the additional filter element containing granular activated carbon as the adsorbent material, the mean particle diameter of the granular activated carbon of the first filter element being greater than the mean particle diameter of the granular activated carbon of the additional filter element.

37. (new) A filter unit for the purification of air, the filter unit comprising:

a first filter element comprising granular activated carbon as an adsorbent material;

an additional filter element comprising granular activated carbon as an adsorbent material,

and

a second filter element comprising granular activated carbon and activated carbon fibers as an adsorbent material,

wherein the filter elements are arranged one after the other in a downstream as follows:

the first filter element, the additional filter element, and the second filter element.